In the Claims

What is claimed is:

- 1. (currently amended) An electrochemical gas sensor, comprising:
 - a first cell in communication with a second cell;
 - each cell having:
 - a substrate having a surface;
- a sensing electrode and a counter electrode being spaced apart from one another and deposited on said surface;
- an electrolytic material in contact with said sensing electrode and having a thickness;

an electrolytic film having a thickness and <u>covering</u> being in contact with said sensing electrode for <u>increasing</u> a contact area between said film, said sensing electrode, and a gas to be detected <u>carrying</u> a flow of ions;

an electrolytic material extending from said sensing electrode to said counter electrodesaid thickness of said electrolytic material is larger than said thickness of said electrolytic film;

- a reservoir in contact with said electrolytic material on a side opposite of said substrate; and
 - a solution in said reservoir for hydrating said electrolytic material.
- 2. (currently amended) The electrochemical gas sensor according to claim 1, wherein said substrates of said first and second cells are <u>in contact with one another-combined</u>.
- 3. (previously presented) The electrochemical gas sensor according to claim 1, wherein said first and second cells further include a reference electrode in contact with

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said electrolytic material and being spaced apart from said sensing and counter electrodes.

- 4. (cancelled).
- 5. (original) The electrochemical gas sensor according to claim 1, wherein said first and said second sensing electrodes are the same material.
- 6. (original) The electrochemical gas sensor according to claim 1, wherein said first and said second sensing electrodes are different materials.
- 7. (cancelled).
- 8. (cancelled).
- 9. (currently amended) An electrochemical gas sensor, comprising:
 - a first cell in communication with a second cell;
 - each cell having:
 - a substrate having a surface;
- a sensing electrode and a counter electrode being spaced apart from one another and deposited on said surface;
- an electrolytic material in contact with said sensing electrode and having a thickness;
- an electrolytic film having a thickness and covering said sensing electrode for increasing a contact area between said film, said sensing electrode, and a gas to be detected;

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an-electrolytic material extending from said sensing electrode-said thickness of said electrolytic material is larger than said thickness of said electrolytic filmto-said counter-electrode;

a reservoir in contact with said electrolytic material on a side opposite of said substrate;

a solution in said reservoir for hydrating said electrolytic material; and said sensing electrode of said first cell being of a material that is more sensitive to detecting a gas than a material of said sensing electrode of said second cell.

- 10. (previously presented) The electrochemical gas sensor according to claim 9, wherein said sensing electrode of said second cell includes a material inert to a gas.
- 11. (previously presented) The electrochemical gas sensor according to claim 9, wherein said sensing electrode includes gold.
- 12. (cancelled).
- 13. (cancelled).
- 14. (previously amended) The electrochemical gas sensor according to claim 9, wherein said first and second cells further include a reference electrode being spaced apart from said sensing and counter electrodes.
- 15. (cancelled).
- 16. (original) An electrochemical gas sensor comprising:a substrate having a surface;

a counter and reference electrode being deposited on said surface;

a first sensing electrode and a second sensing electrode, being spaced apart from one another and from said counter and reference electrode, being deposited on said surface;

a first electrolytic material having a first thickness and being in contact with said first sensing electrode for carrying a flow of ions;

a second electrolytic material having a second thickness and being in contact with said second sensing electrode for carrying a flow of ions; and said second thickness being greater than said first thickness.